

MEMORANDUM TO: Patrick W. Baranowsky, Chief  
Operating Experience Risk Analysis Branch  
Division of Risk Analysis and Applications  
Office of Nuclear Regulatory Research

FROM: Hossein G. Hamzehee  
Operating Experience Risk Analysis Branch  
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Office of Nuclear Regulatory Research

SUBJECT: PUBLIC MEETING ON RISK-BASED PERFORMANCE INDICATOR  
WHITE PAPER - MEETING MINUTES

A public meeting was held on Friday, April 28, 2000 to discuss external stakeholders comments on the concept and approach of the risk-based performance indicator development, as described in the white paper. This meeting was held at the U.S. Nuclear Regulatory Commission offices in Rockville, Maryland. The meeting agenda and the list of attendees are provided in Attachments 1 and 2.

We received comments from our reviewers at the meeting, which are summarized in Attachment 3. The written comments are expected by mid-May, 2000. The written comments and their resolution will be included in a SECY paper to the Commission in June, 2000.

Attachments: As stated

MEMORANDUM DATED:    /    /00

SUBJECT:    PUBLIC MEETING ON RISK-BASED PERFORMANCE INDICATOR WHITE  
PAPER - MEETING MINUTES

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**ACCESSION NO.:**  
**TEMPLATE NO.:**

**PUBLIC MEETING ON RISK-BASED PERFORMANCE INDICATOR WHITE PAPER**  
**U. S. Nuclear Regulatory Commission**  
**Conference Room T8-A1**  
**April 28, 2000**

**Meeting Agenda:**

10:00am - 10:15am:	Welcome	Tom King
10:15am - 10:45am:	Purpose of Meeting	Steve Mays
10:45am - 11:45am:	Discussion of Comments	All
	<ul style="list-style-type: none"><li>• Are concepts in white paper consistent with RROP philosophy and direction?</li><li>• Are RBPI characteristics appropriate?</li><li>• Are RBPI development steps appropriate?</li><li>• Are proposed RBPI elements (data sources, RBPIs, industry trends) appropriate for RROP?</li><li>• Are proposed Phase-1 products appropriate?</li></ul>	
11:45 - 12:00pm:	Summary of Meeting Results	Steve Mays

## **MEETING ATTENDEES**

<b><u>NAME</u></b>	<b><u>ORGANIZATION</u></b>	<b><u>PHONE</u></b>
Hossein Hamzehee	NRC/RES	301-415-6228
Jim Lynch	INPO	770-644-8671
Steve Floyd	NEI	202-739-8078
Tom Boyce	NRC/NRR	301-415-1130
Peter Koltay	NRC/NRR	301-415-2957
Dave Lochbaum	Union of Concerned Scientists	202-332-0900
Jim Riccio	Public Citizen	202-546-4996
Patrick Baranowsky	NRC/RES	301-415-7493
Steve Mays	NRC/RES	301-415-7496
Don Hickman	NRC/NRR	301-415-8541
Gareth Parry	NRC/NRR	301-415-1464
Michael Snodderly	NRC/NRR	301-415-2047
Tom Wolf	NRC/RES	301-415-7576
Farideh Saba	NUSIS	301-258-2466
Tony Brooks	NEI	202-739-8022
Ian Jung	NRC/NRR	301-415-1837
Ashok Thadani	NRC/RES	301-414-6641
Bennet Brady	NRC/RES	301-415-6363
Ralph Beedle	NEI	202-739-8088
Deann Raleigh	SERCH/Bechtel	301-228-6312

Attachment 3

## **Summary of Comments Discussed at the Meeting**

At the meeting on April 28, 2000, five specific questions were raised. The questions and the corresponding responses/comments are summarized below:

### **Question 1:**

Are concepts in the RBPI white paper consistent with the philosophy and direction?

### **Comments:**

- Some policy-related issues were raised by NEI as summarized below:
  - Current PIs monitor a sample of risk-significant areas. The RBPIs appear to be more of an attempt to directly measure risk.
  - The inclusion of RBPIs should result in reduction of inspection activities. In other words, there should be a balance between the performance measured by PIs and inspections.
  - The current Action Matrix will need to be changed to reflect the number of new PIs.
- The following comments were made by Public Citizen (PC):
  - The representative of PC strongly agrees with the ACRS position with respect to RBPIs.
  - Some of the technical areas such as development of RBPIs for shutdown and Fire may be problematical.
  - RBPIs should be presented in a way that ties them to events that drive them.
  - Don't use PIs as an excuse to reduce inspection hours. (PC)

### **Question 2:**

Are RBPI characteristics appropriate?

### **Comments:**

- The peer review process for the SPAR models was not discussed in the RBPI white paper. There should be a commitment to peer review the SPAR models? (NEI)
- One of the RBPI characteristics should be "Easy to understand and collect data". Another RBPI characteristic should be "Minimize potential for unintended consequences; e.g., causing the operator to take inappropriate action in order to avoid crossing a PI threshold". (NEI)

### **Question 3:**

Are RBPI development steps appropriate?

### **Comments:**

- The RBPI white paper should address the development of RBPIs with respect to model capability. It should also be noted that the involvement of Regions and their inputs are very critical. (PC)
- The Green/White threshold based on risk versus 95% concept should be explored. (NEI)

**Question 4:**

Are the proposed RBPI elements (data sources, RBPIs, industry trends) appropriate for RROP?

**Comments:**

- An appropriate Green/White threshold for the current RROP performance indicators should be developed. Enough cushion should be left to allow for planned maintenance to avoid unintended consequences. The target in this area ought to be consistent with other programs such as Maintenance Rule. (NEI)
- Validation of RBPIs is an important step of the development effort. (UCS)

**Question 5:**

Are proposed Phase-1 products appropriate?

**Comment:**

- An integrated indicator may not be appropriate. There is a problem with a single indicator of performance. (NEI)

Some of the comments were related to the RBPI process and general communication issues as summarized below:

**Comments on Process Issues:**

- RBPIs should not be limited to the scope of the RROP. The PIs should address activities in the following areas: (UCS)
  - . Reactivity control
  - . Decay heat control
  - . Radioactive material control
  - . Public and workers radiation exposure control

- One of the RBPI characteristics should be "RBPIs should cover all modes of plant activities". In addition, the 3<sup>rd</sup> bullet of RBPI Characteristics viewgraph (Within each mode, RBPIs should cover risk-important SSCs to the extent practical) should be eliminated. (UCS)
- RBPIs need to mesh with the existing PIs to provide stability for the process. (UCS)

- The time lag between the performance data collected and the availability of PI outputs should support the current RROP structure. (NRC/NRR)
- Licensees should own the data and/or performance indicators. (NRC/NRR)

**Comments on General Communication Issues:**

- The development of plant-specific thresholds should not create a perception that different plants have different levels of safety. (PC)
- Similar events at different plants that result in different risk classification will require explanation. (UCS)
- Rename RBPI to avoid the perception that there are risk-informed regulations and risk-based regulations, where, in fact, they are the same. (NRC/NRR)
- The relationship between risk-based PIs and risk-informed inspections should be explained. (NRC/NRR)
- The data should be made available to the public.

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<p><b>REMARKS</b></p> <p>PUBLIC MEETING ON RISK-BASED PERFORMANCE INDICATOR WHITE PAPER - MEETING MINUTES</p>
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